

## DAKE ENGINE CO.

Air and Steam Engines and Motors, and Contractors' Machinery  
GRAND HAVEN, MICH.

### REPRESENTATIVES

NEW YORK, H. L. DRULLARD, 30 Church Street  
BOSTON, H. L. BOND Co., 383 Atlantic Avenue  
CHICAGO, J. E. CHISHOLM, 1410 Fisher Building  
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CLEVELAND, W. M. PATTISON SUPPLY Co.  
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MOBILE, TURNER SUPPLY Co.  
SEATTLE, CONTRACTORS' SUPPLY & EQUIPMENT Co.  
DETROIT, W. H. ELLERY, 512 Moffat Building

### Products.

STEAM and AIR MOTORS, HOISTING ENGINES, SWINGING ENGINES, MOTOR CRABS, PNEUMATIC GEARED HOISTS, ELECTRIC HOISTS, SPUD HOISTS, DRILL HOISTS, ELEVATOR HOISTS, GANG PLANK HOISTS, MARINE MACHINERY, and GRAY IRON, BRASS, BRONZE and ALUMINUM CASTINGS.

### Dake Air or Steam Motor.

This engine is not of the rotary type, but a perfect double reciprocating engine, occupying less space than a rotary engine of the same power, and operating with greater efficiency.

All Dake engines are rated at eighty pounds pressure. The steam consumption is about the same as that of the ordinary slide valve engine.

Made either with or without reversing throttle. Can be placed in any position and will operate equally as well with shaft in perpendicular as horizontal position.

*Scope of Use*—The non-reversing type is used for direct-connection to fans, blowers, centrifugal pumps, dynamos, etc., and the reversing engine is especially adapted for use on cranes, contractors' hoists, swinging gears, derrick crabs and all forms of machinery where a compact reversing engine of from  $\frac{1}{2}$  to 30 H.-P. can be used (Fig. 1).

Our stationary type as shown with base, governor and fly wheel, is especially adapted for operating small plants, such as laundries, creameries, blacksmith shops, filing rooms, etc., where a belt-driven engine is required.



Reversing Engine

FIG. 1. DAKE AIR OR STEAM MOTOR



Stationary Engine

### Dake Pneumatic Geared Hoists.

Can be furnished with either chain or wire cable. For operation with steam or compressed air. Minimum distance obtainable between hooks shorter than on any other hoist.

*Scope of Use*—Extensively used in machine shops, foundries, navy yards and municipal plants throughout the United States. Sizes,  $\frac{1}{2}$  to 10 tons capacity.

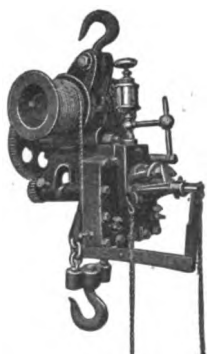


FIG. 2. PNEUMATIC HOIST WITH HOOK

### Dake Trolley Hoist.

The Dake pneumatic trolley hoist is designed to operate on lower flanges of single I-beam or on channels. Can be furnished with either wire rope or chain. Gears can be enclosed if necessary, at small extra cost. Sizes,  $\frac{1}{2}$  to 10 tons capacity. Can also furnish these hoists with electric motors in place of steam or air motors.

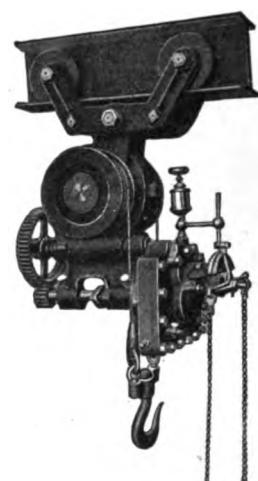


FIG. 3. PNEUMATIC HOIST WITH TROLLEY

### Dake Trolley Hoist with Racking Motor.

Hoist is arranged to run on two I-beams or channels, and in addition to the hoisting motor is equipped with an extra motor for racking. These hoists can be furnished with electric motors in place of steam or air motors. Sizes, 2 to 10 tons capacity.



FIG. 4. PNEUMATIC HOIST WITH TROLLEY AND RACKING MOTOR

### Dake Electric Hoist with Hook.

Hoist can be furnished with trolley in place of hook if desired. In writing for quotations advise whether D.C. or A.C. current is used. If D.C., advise voltage; if A.C., voltage, phase and cycle—also, load and speed at which you wish to lift.

The most compact electric hoist on the market. Motors and control apparatus are of the very best type.



FIG. 5. ELECTRIC HOIST WITH HOOK

### Limit Switches.

All of these pneumatic and electric hoists are equipped with limit switch to stop load automatically at highest point of travel. Sizes,  $\frac{1}{4}$  to 15 tons capacity.

### Electric Motors.

We are prepared to equip our hoists, swinging gears or crabs with electric motors in place of steam

or air motors. Let us know the work you have and prices on the machine best suited to requirements will be submitted.

**Dake Single Drum Hoist.**

Illustration shows the single drum hoist with reversing engine and drum tight on shaft. It is single geared, and capacities and speeds are the same as the friction hoists.

For operation with either steam or compressed air.

Lubricators and petcocks furnished with all of these hoists. Sizes, 5 to 30 H.-P.

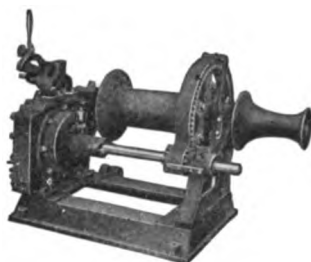


FIG. 6. DAKE SINGLE DRUM HOIST, WITH REVERSING ENGINE AND DRUM TIGHT ON SHAFT

**Dake Single Drum, Single Geared Friction Hoist.**

Illustration shows Dake single drum friction hoist with non-reversing engine. Hoist is single geared and is especially adapted for service where a fast lift is desired. Equipped with friction lever and foot brake, and load can be held at any point. Sizes, 5 to 30 H.-P.

**Dake Crane Hoist.**

Hoist shown is especially designed for bolting to derricks or jib cranes. This machine is a great labor saver. Sizes, 5, 7 and 10 H.-P.

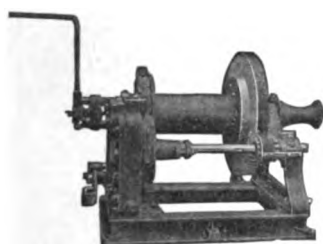


FIG. 7. DAKE SINGLE DRUM SINGLE GEARED FRICTION HOIST

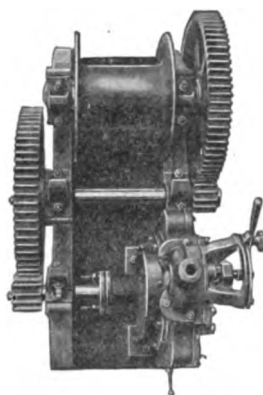


FIG. 8. DAKE CRANE HOIST

**Dake Single Drum, Double Geared Friction Hoist.**

The illustration shows Dake single drum friction hoist, double geared. A very compact and powerful hoist, designed for service where slower speed and a greater lifting capacity are required. Especially adapted for pulling cars. Sizes, 7 to 30 H.-P.

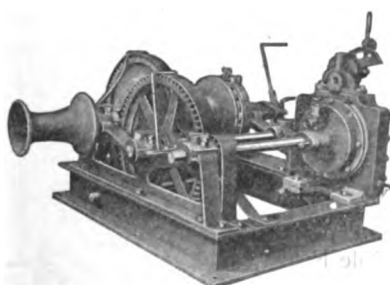


FIG. 9. DAKE SINGLE DRUM DOUBLE GEARED FRICTION HOIST

**Dake Single and Double Drum Motor Crabs.**

Single drum crab is used for stiff-leg derricks and cranes, while the double drum is especially suited for boom derricks. All machines equipped with brake bands, pawl, ratchets and levers for throwing in and out the pinions. Can also furnish hand power crabs.

Crabs can be furnished with additional set of gear and pinion for faster speed of lift at a small extra cost, if desired. Sizes, 3 to 10 H.-P.

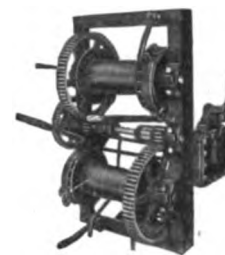
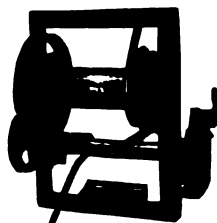


FIG. 10. DAKE SINGLE AND DOUBLE DRUM MOTOR CRABS

**Dake Swinging Engine.**

Operated with either steam or compressed air.

*For Swinging Derrick Booms*—Illustration shows Dake independent swinging engine designed for swinging derrick booms. Machine can be located at any convenient place near main hoist so that levers of hoist and swinging engine will be within easy reach of operator.

Machine is equipped with Dake reversing engine, which has no dead center and will start, stop or reverse at will of operator.

Sizes, 5, 7, 10 and 15 H.-P.

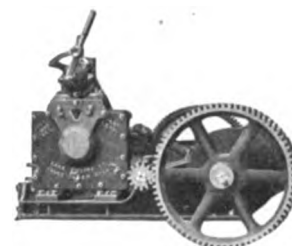


FIG. 11. DAKE SWINGING ENGINE

**Dake Power Spud Hoists.**

For steam or compressed air. The Dake spud hoist has been designed for raising and lowering spuds on dredges. Machine is equipped with Dake reversing engine, which has no dead center and which will start, stop or reverse instantly by means of reversing throttle.

Hoist shown here is equipped with pinion for meshing into rack on spud. However, if preferred, quotations will be made on these hoists equipped with drum for raising and lowering spuds by means of wire cable in place of rack and pinion. Double ratchets and dogs provided to hold spud securely at any point.

Sizes, 7, 10, 15, 20 and 30 H.-P.



FIG. 12. DAKE POWER SPUD HOIST

**Catalogue and Prices.**

Write for the general catalogue describing our entire line, together with prices on same.